

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Quad-Cities Nuclear Power Station, Unit One	DOCKET NUMBER (2) 0 5 0 0 0 2 5 4	PAGE (3) 1 OF 0 3
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TITLE (4)
Reactor Scram and ECCS Initiation From False Signal

EVENT DATE (6)			LER NUMBER (8)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES		DOCKET NUMBER(S)
0 8	0 8	8 4	8 4	0 1 3	0 0	0 9	0 6	8 4	NA		0 5 0 0 0
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)											

OPERATING MODE (9) 3	POWER LEVEL (10) 0 0 0	20.402(b)	20.406(a)(1)(i)	20.406(a)(1)(ii)	20.406(a)(1)(iii)	20.406(a)(1)(iv)	20.406(a)(1)(v)	20.406(c)	50.38(c)(1)	50.38(c)(2)	50.73(a)(2)(i)	50.73(a)(2)(ii)	50.73(a)(2)(iii)	50.73(a)(2)(iv)	50.73(a)(2)(v)	50.73(a)(2)(vii)	50.73(a)(2)(viii)(A)	50.73(a)(2)(viii)(B)	50.73(a)(2)(ix)	73.71(b)	73.71(c)	OTHER (Specify in Abstract below and in Text, NRC Form 365A)

LICENSEE CONTACT FOR THIS LER (12)		TELEPHONE NUMBER	
NAME James Guest, extension 174	AREA CODE 3 0 9	6 5 4	- 2 2 4 1

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO			

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On August 8, 1984, at 2206 hours, Unit One was shutdown for a Refueling Outage. The mode switch was in the STARTUP position so that the Rod Worth Minimizer could be tested. A new vessel level instrument line was improperly backflushed, and the low water level scram and low-low water level Emergency Core Cooling System setpoints were reached. All low pressure Emergency Core Cooling Systems, Diesel Generators, and Primary Containment Isolation Systems functioned as designed. Vessel level at the start of this event was +35 inches and rose to +100 inches during the event.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
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TEXT (If more space is required, use additional NRC Form 366A's) (17)

Event Description

On August 8, 1984, at 2206 hours, Quad-Cities Unit One was in a shutdown condition during a refueling outage. The Reactor mode switch was placed in the STARTUP position for testing the Rod Worth Minimizer. The following spurious signals were received: low water level (+8 inches) Reactor scram, Emergency Core Cooling System (ECCS) initiation from low-low water level (-59 inches), and Primary Containment Isolation closures for Groups 1, 2, and 3 (+8 and -59 inches). All systems performed as designed. The Control Room operator secured all the ECCS pumps and the Diesel Generators after the event was recognized and level in the vessel was verified. Water level in the vessel increased from +35 inches (above the bottom of the vessel separator skirt) to the main steam line level after approximately 18,000 gallons of water were injected. The consequences of this event and the safety implications were minimal. The initiation signals were invalid, no design bases were exceeded (Reactor shell and flange temperatures remained constant), and no equipment was damaged. This report is being submitted in accordance with the Code of Federal Regulations 10 CFR 50.73(a)(2)(iv).

Cause

The cause of this event was personnel error. Two new level indicators were added in the Reactor Core Isolation Cooling (BN) room at the 554 foot elevation by a Station modification. Piping was added to each of the two pairs of existing +60 to -60 inch level sensing lines on the 623 foot elevation. Each line has two isolation valves at the 623 foot elevation. The Instrument Maintenance Foreman believed that all valves were in service and were open when in reality some were still out of service and closed. The Instrument Mechanic proceeded to backfill the reference leg of one pair of lines and found there to be no flow through the pipe. This line was now pressurized. Realizing that the valves were out of service and closed, and unaware that the lines at the 554 foot elevation were attached to those on the 623 foot elevation, the Instrument Maintenance Foreman requested the valves returned to service prior to the Instrument Mechanic de-pressurizing the lines. The Equipment Attendant opened the isolation valves. This caused the level instrumentation on that sensing line to spike downscale for an instant and the safety systems initiation resulted.

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

Corrective Action

The level instrumentation lines had been flushed and backfilled correctly and without incident previously during the outage. Backfilling is done usually only during an outage. Since the piping was new, the Instrument Mechanic did not realize that his actions could affect the Reactor Protection System. Caution cards were placed on the new level instruments to inform the Instrument Mechanic that the Reactor Protection System, Primary Containment Isolation, and ECCS initiation level instrumentation could be affected by backflushing this piping. In addition, a procedure is being written to explain how to perform such work. The Instrument Mechanic and his Foreman were counseled to be more careful and this report will be discussed with the entire Instrument Maintenance Department.



Commonwealth Edison

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NJK-84-272

September 6, 1984

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Reference: Quad-Cities Nuclear Power Station
Docket Number 50-254, DPR-29, Unit One

Enclosed please find Licensee Event Report Number (LER) 84-13
for Quad-Cities Nuclear Power Station.

This report is submitted to you in accordance with the require-
ments of the Code of Federal Regulations, Title 10, Part 50.73(a)(2)-
(iv), which requires the reporting of any event or condition that
resulted in manual or automatic actuation of any engineered safety
feature, including the Reactor Protection System.

Respectfully,

COMMONWEALTH EDISON COMPANY
QUAD-CITIES NUCLEAR POWER STATION

N. J. Kalivianakis
Station Superintendent

NJK:DBC/bb

Enclosure

cc B. Rybak
A. Morrongiello
INPO Records Center
NRC Region III

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